THE GENESEE FARMER.

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THE FARMER.

SATURDAY, JUNE 22, 1833.

THE AILANTUS.

The AILANTUS *glandulosa* is an ornamental, or timber tree, a native of China, of recent introduction into our country. It is frequently known by the name of the *Tree of Heaven*, probably from its rapid and tall growth. For planting in streets and parks it has already become popular. We have seen at Providence, (where we believe it was first introduced,) and at Philadelphia, trees that have been planted out eight or ten years, which are generally and greatly admired. They have also been more recently, but extensively, planted about New-York. The Ailantus was introduced into the Albany Nursery about six years ago, where it withstood the severe winter of 1831–2, and where it has since been extensively multiplied. The growth is very rapid, often ten feet or more in a season, in young trees. The leaves are large, resembling much the Sumac, unequally pinnate, with foot stocks from one to three feet in length; and it has numerous green flowers in a terminate pedicel. The flowers are monœcious, and it is not known that the female plant is yet among us. The tree grows well upon a poor soil, particularly if it is calcareous. The wood is hard, heavy, glossy like satin, and susceptible of a very fine polish.

THE TILIA.

The Tilia is among the most generally esteemed trees for ornamental planting, especially for promenades and avenues, is very umbrageous, and possesses a handsome form. It is known under the several common names of *Lime* and *Linden* in Europe, and of *Bas* wood with us, the latter probably a vitiation of Bas*t* wood, from the *bast*, or matting, which is extensively manufactured from its bark, particularly in Russia. There are eight species of this genus described, differing principally in the size of the leaf and the color of the bark, five of which are common to Europe, and three to America. The honey made from the flowers of this tree, in the forests of Lithuania, is reckoned the best in the world, and sells, if we credit Loudon, at more than double the price of any other. The natural growth of the Linden indicates a good soil.

All the Lindens are employed in ornamental planting, though the rubra, or red twigged, has now a preference in our towns. A more beautiful avenue of trees will hardly be found, than in the promenade in Chestnut-street, Philadelphia, in front of the old Congress Hall, which is composed wholly of different species of the Tilia. They exhibit a symmetry and uniformity of appearance, and a foliage so dense as almost wholly to intercept the rays of the sun. Those of our readers who have occasion to visit Philadelphia, cannot but be highly gratified in looking at this place and Washington square, particularly in the evening, when the lamps are burning.

FLOWERING SHRUBS.

Among the flowering shrubs which have been recently introduced among us, there are three particularly entitled to notice, as highly deserving a place in our shrubberies and court yards, viz: the Tartarian upright honeysuckle, (*Lonicera tatarica*,) pink and red varieties, and the Fringe tree, (*Chionanthus virginica.*) The two first grow ten feet high, and the latter somewhat taller. They flower in our latitude in May and June. The flowers of the two first are pink and red, of the latter white, in numerous long bunches. When of tolerable size, they make a beautiful show of blossom. The Loniceras are perfectly hardy, and of easy propagation. The Chionanthus is somewhat sensitive to the winters on the Hudson, but we think is sufficiently hardy for the lower valley of the Genesee.

AMERICAN FLORA.

One must visit Europe to know how to prize the beauties of our American flora. Many of the herbaceous perennials of our woods, as well as our trees and shrubs, are eagerly sought for there, and command great prices. A late London horticultural publication advertises our Trilliums, Liliums, Cypripediums, Orchis, and other common plants, at half a dollar to a dollar or more the plant. American plants constitute the most desirable objects in the pleasure grounds of an European, which would be deemed imperfect without them. And yet how few among us appreciate or enjoy the beauties which nature has so lavishly scattered around us, and which seem designed to administer to our pleasure, and to call forth our admiration and gratitude. Surely these bounties of the Creator were not intended to waste their beauty and their fragrance on the desert air, unnoticed and disregarded by the lords of the creation.

BARTRAM GARDEN.

To the admirers of the beauties of vegetable nature, the old Bartram Garden, situate on the banks of the Schuylkill, three miles below Philadelphia, offers a rich treat. No spot, probably, in the world, of equal size, comprises specimens of so many useful and ornamental North American plants, of mature age and size, as this does. The writer recently spent a few hours amid the vernal beauties of this garden, with great admiration and delight. Near the center stands a majestic cypress, measuring thirty feet in circumference at the base, and soaring proportionably high, planted by the elder Bartram ninety years ago. The oaks, the pines, the maples, the splendid magnolias, and other lords of our forests, rear their heads around,—while the rhododendrons, kalmias, azaleas, gordonia, anonia, tupeloes, and hundreds of other humble natives of our clime, fill up the intervals, and with their diversified blossoms and foliage, highten the deep interest of the scene, and impart a beauty and a fragrance which enrapture the almost bewildered senses of the visitor.

These grounds are in good keeping, and are under the management of Col. *Carr*, the proprietor, a printer by profession, an obliging and intelligent gentleman, *of course*. Connected with them is an extensive nursery of fruit and ornamental trees and plants, and a range of green and hot houses, well stocked with exotic plants. The original dwelling is in good preservation. It is of stone, and was built entirely by the hands of Bartram himself, who has left many other memorials of his indefatigable industry, of his mechanical skill, and of his devotion to natural science.

INFLUENCE OF THE MOON.

We conclude in our present number, the paper of Dr. OLBERS, *On the Influence of the Moon*. The fair and candid manner in which he examines the subject, gives great weight to his conclusions; and if any of our readers have hitherto been swayed by the very prevalent notion of that influence, we would take the liberty to recommend this paper to their special attention.

We deem it of great importance that a farmer should hold correct opinions on this subject; for if they are not correct, and especially if he believes in the whole doctrine of lunar influence, he is prompted almost daily to do, or to omit, something either unnecessary or improper. Any one of these acts, in itself, may indeed be a small matter, but however small, if it be not warranted or required by common sense and sound philosophy, he is a slave to popular prejudice. Though this is an undeniable truth, yet we aim to present it with due deference, and should be happy could we free any of our readers from such a state.

Dr. *Olbers*, in considering the effects of the moon on the weather, has confined his views to its attraction, and to the tides which it causes in the air and in the ocean; but we conceive that some entertain notions of its influence that will not be met by his arguments. For example, some believe that *the first three days after the new moon are an index of all the weather that is to follow in the remaining twenty-six days of that lunation.* Here it is evident that our satellite has to perform a much more complex operation in three days than either to raise, or to dispel a storm,—for it has to point out in miniature, the rain, hail or snow—the clouds and the sunshine—the winds and the calms, with horological precision, or the weather would run all awry; and of course the changes in these three days must be nearly nine times as rapid as in the rest of the month. Now it is certain that Astronomy is unequal to the explanation of such a business, and we can only refer it to Astrology, that occult science which leaves reason far out of sight.

When we first fixed our abode in the Genesee Country, we were presented by some new neighbor with a rule for judging of the weather which we prefer to the foregoing on account of its simplicity, or,—as mathematicians would say of a formula,—for its elegance: *The last Friday in each month governs the weather for the next month.* Now the superiority of this rule is evident, and we greatly admire the ingenuity of

him that contrived it. It is not even necessary to know when the moon changes. Instead of watching and recording the weather for three days, the business may be all done up in one day. The changes of that day indeed must be three times as rapid as in the first rule; but we can well afford to spend it in learning all about the weather for one month to come. Besides, this rule is not trammeled with lunations, the chief point being to remember the last Friday in the month.

We were assured that this rule was very correct, for they had observed it for many years, and they had never known it to fail; and we observed after two or three years more, that they had detected no errors, and still considered it very useful.

There is another rule for the weather however which we would rather prefer to the foregoing, were it not limited to *the mowing season*. Some years ago, on a journey, we fell in with a gentleman of very extensive reading who was looked up to as the luminary of his neighborhood. The weather had not escaped his notice, and for its regulation he prescribed as follows: *Whatever day of the week you begin to mow, on the same day of the next week you will have the same kind of weather.* His neighbors, he said, had derived great benefit from the discovery, and he wished us to extend the knowledge of it into this distant land.

We hope our readers are now sufficiently edified; and if they adopt either of those rules, they must be prepared to renounce the word *fickle* as applied to the weather. We should be most gratified however, if they could join with Dr. *Olbers* in believing that "*the influence of the moon upon the weather is so very small, that it is totally lost among the infinite number of other forces and causes which change the equilibrium of our very movable atmosphere.*"

THRASHING MACHINE.

This instrument, as we have observed before, is an article of great importance now-a-days. Firstly—they are important because they are *rapid*—that part of the story is true; and in these times of improvement and the march of mind,—these times, when a sucking child can teach its granny how to suck eggs,—these times of railroads and steam-boats, why, forsooth, may not the farmer stride the thunder-bolt, and ride with the rest? It certainly is his turn, and his right; it gives him more time to dig his stumps, make his fences, and ride round in his one horse wagon like a gentleman, and to keep tally of the grand march of intellect. Secondly—because they are labor-saving. Now-a-days, as no gentleman labors—why, the horse and ox must do it all. But the labor saving part is rather a moot point, and as the ox and horse are rather taciturn, and won't speak, though asses did of yore, and even *now*, as some of our readers might say and not commit any poetry—yet if they could speak, they would say that the same number of pounds exerted in the old way, would perform the same labor; but then it would not be up to the speed of the times, and farmers, who are so important a wheel in this world's machinery, should revolve with as much velocity as those of minor importance; it is undoubtedly their right—and who shall gainsay it.

Some fidgety old gentlemen, who meddle with the business of others, and study political economy, that compound of metaphysical humbug and statistical nonsense, pretend to say that this world is in danger of being over populated. These fears may have some foundation in Europe, but cannot at present be applied to this country, at least as long as the assertion is not controverted, that twelve acres of land will support a family of eight persons. At that rate there is *still liberty* and space for a wonderful lot of bipeds, with hard hands and sun burnt countenances, to subsist in this *new world*. It is hardly worth while to borrow trouble, and to lament in prospective over a thousand contingencies that may never happen; and if they should, why, the remedy is easy,—turn cannibals and eat one another; it is as lawful as to destroy the human race by unjust wars, slavery, or peddling whiskey. Water finds its level, and so will population. All things are about right, and if not, it will be a hard job to mend them.——But what has all this to do with thrashing machines? Only this, that whether they are profitable or not, and whether they are, in reality, economical or not, and whether it does not make some farming hands idle, with nothing to do all winter,—all of which is of no importance on the new *go-a-head principle*,—the horses must do the work. There is no danger of an overplus population; if they don't swing the flail they can find something else to do, and horses cost nothing, nor their keeping,—like a *queer jigger* of a fellow we once knew, who made himself a walking cane, containing a gun, umbrella, and fishing apparatus, and when asked what it cost, replied, "*nothing, I made it myself!*"

The moral of all this is, that we fear, and think we observe, the bad effects of the ease with which the wheat crop is produced, and the almost exclusive attention that is paid to it, in the idle habits of some of the western farmers,—in the slovenly appearance of their farms, fences, houses, barns, &c. *Idleness is the parent of vice;* and, disguise it how you will, *leisure* is first cousin to it; at least on the hands of those who live by the sweat of the face.

A good farmer, in our opinion, will not trust his whole chance on one crop alone: he should have hay, wheat, corn and potatoes, oats, peas, beans, flax, buckwheat, turneps, *quantum suf.*, and *some of every thing else.* There is wisdom in this course. If insects, blight, storm, or other casualties, destroys one, he has still resources that will sustain him, and he will not be obliged, in the fall, to say to his merchant and mechanic, my wheat was blasted, *or turned to chess*, or some other exclusive dependence failed.

Often, when admiring the broad rich acres of the west, whose fertility outrivals the "fatness of the Nile," have we thought of the poor stone clad fifty acres that our worthy progenitor contrived to live upon, and *grow up ten of us*, who for capacity did not lack in cubic inches, sinews, backbone or muscle, whatever we might do in what now-a-days is called intellect, reading, pot-hook and trammels, and all that sort of thing; but at any rate we had to be industrious. *Keep moving* was the word, and our readers will appreciate the necessity on a piece of land so stoney that the *rye* had to be shot in with a musket, and where it cost more time to find earth enough to cover a hill of corn than it would to eat it after it was grown—where the sheep's noses had to be ground up so that they could get at the grass among rocks that we dare not move for fear a more grievous swarm was under them; yet on such a waste did your humble we come up and go to seed upon; and upon such have thousands of others drew their natal breath, who now sit in the world's high places, while the sons of *leisure, ease* and *luxury*, vegetate on the road side.

VERNAL FLOWERS.

[In a letter to the Editors, dated May 31.]

As appertaining to the catalogue of plants which bloom in the early part of this month, I ought to have mentioned the Siberian lilac, and the Tartarean honeysuckle. The first (*Syringa chinensis*) is an intermediate species between the common and the Persian lilacs. A wreath of fifteen or twenty panicles of purple flowers, ornament the sides and ends of the slender branches, which contrast finely,—more especially when they are bent by the rain-drops,—with the erect panicles of the common kind.

There are two varieties of Tartarean honeysuckle (*Xylosteum tartaricum*): the white and the red (so called); yet the red is a very light pink, and the white is only less tinged with red. The varieties are sufficiently distinct, however, and both very beautiful.

Within the last fortnight, we have had several kinds of *Pæonia* in bloom, together with *Iris, Phlox, Philadelphus, Dictamnus, Viburnum, Kerria japonica*, and some roses.

Pæonia officinalis is a fine species which has spread into several varieties. Of these, perhaps the finest is the old double crimson; and indeed it is one of the most splendid flowers in existence. The "double rose," the double kind marked "albicans," and Sabine's single crimson, are all very desirable plants.

Pæonia albiflora (*P. edulis* of some authors) is also a remarkably fine species, and its varieties are numerous. That called "uniflora" *in my bill*, is a misnomer; but no matter——I have *four* or *five* fine flowers on a stalk instead of *one;* and they are very large, and of a beautiful white with yellow stamens. The "rubescens," though similar in other respects, is tinged with red and has purple stigmas. The seeds of all these germinate freely, but will not flower under three or four years.

From these the double fringed variety of *P. paradoxa* differs in color, which is purple.

Iris florentina, white with a tinge of blue, is fragrant. There are also other species that make a fine display, as the great bluish purple, the large yellow striped, the variegated yellow, together wth *I. sambucina* and *I. siberica.*

The species of *Phlox* which take their turn to bloom at this period, are *P. ovata* one foot high, and *P. maculata* two feet high, both with fine red flowers. *P. suaveolens* is considered a variety of the latter; and *P. nivalis* a variety of *P. setacea*, both with elegant white blossoms. The last literally covers the ground like a flake of snow.

What Cowper calls "syringa ivory pure" is *Philadelphus coronarius*, which immediately succeeds the lilac and Tartarean honeysuckle and is very fragrant. It is eclipsed however by *P. grandiflorus* with much larger and whiter flowers, also fragrant, a little later, and of extra

ordinary beauty. Both are perfectly hardy; and so far have been free in my garden from the depredations of insects.

The snow-ball (*Viburnum opulus, var. roseum*) is an old favorite; and all our researches in distant lands, have produced nothing more showy. This variety is barren like the exterior flowers in the cymes of *Viburnum oxycoccus*, and never produces seeds. It is easily increased by layers.

There is a native species besides *V. oxycoccus* which deserves cultivation on account of its white flowers which are very ornamental when its branches originate near the ground: I mean *V. pentago*. The fruit is eaten by children.

Kerria japonica (formerly *Corchorus*) was once treated as a tender plant. It is an elegant shrub, producing flowers of a golden yellow so very double that it has been called the Japan globe flower from their roundness. It is easily increased by the suckers.

Single flowers are commonly *earlier* than double flowers of the same species; and in this way we account for the earliness of the Scotch rose, the pendulous rose from the Alps, and the single yellow rose. The broad petals and singular color of the last, render it quite ornamental.

But there is no border plant more worthy of a place than the *white*, and the *red*, *Dictamnus*. These are splendid flowers, possessing a peculiar fragrance, and the contrast of colors, is very pleasing. They are best increased by seeds, which ought to be planted fresh from the capsules, but several years are required to bring them to maturity.

The double *Lychnis diurna* of a deep rose color is very fine, and even more ornamental than the double scarlet Lychnis. I think it is very rare in this quarter—I have never seen it in flower till this season. Who can supply us with double *Lychnis flos cuculi*, and double *Lychnis viscaria*.

INDIAN CORN.

I have not seen much said in the Farmer upon the best mode of cultivating Indian Corn. I suppose people generally think that they know too much on that subject to receive benefit from the experience of others; yet I have noticed that people generally work among their corn in rather a superficial manner, especially the first time of ploughing and hoeing. The general practice is, to take a plough with a mold-board on, and endeavor to loosen just soil enough to hoe the corn with, which is about all they can do; for if the plough goes in deep, and turns up a large furrow, it will cover up the corn very much. To obviate this difficulty, my method is, to take off the mold-board, for I use for this purpose an old fashioned bull plough, and go through my corn the first time in this way, ploughing to the depth that my ground was first broken up, and that too with two furrows in a row each way. This kind of a plough will thoroughly mellow the ground, without throwing it up so as to cover the corn. My experience has taught me that corn will do much better in this way, with but little hoeing, except clearing out the weeds well from the hills, which always ought to be done, than by the common mode of ploughing with the mold-board, and much pains with the hoe, to make a handsome hill. E. WILBUR.

Pen Yan, 6th mo. 3, 1833.

HOUSTONIA CERULEA.

At page 110 of the second volume of the Genesee Farmer, I made some remarks on the cultivation of *Houstonia cerulea;* but I have since adopted a different method which I prefer, and which has proved very successful.

The roots of this little native are very short, taking but a feeble hold on the soil; and from this circumstance it is liable to other casualties besides the disturbance of the earth worm. During severe drouths it suffers in gardens, not unfrequently perishing entirely. On the contrary, in wet seasons, or where it has incidentally received a part of the water designed for other plants, its vigor is much increased; and on the mountainous banks of the Niagara river near Lewiston, I have seen it on northern declivities embedded in damp moss. This also protects it from the severities of winter. I had one fine plant destroyed, as I supposed by the cold, for it grew in a shallow trough, partly sunk in the ground, and which of course intercepted the warmth of the earth from below.

In the latter part of last autumn, a friend procured for me more than twenty of this species of *Houstonia*. Fearing that they would be thrown out by the frost in winter if planted in the usual way, I put them together in a small heap, and covered them over two inches thick with earth, as if they had been turneps. This spring after the ground was settled, I set them out in a bed of sandy loam, covering the whole of it with moss, and crowding it closely round the plants. This rendered the working of the earth worms of little consequence, as it excluded the sun and wind from the roots; and while it retained the whole of every shower, the evaporation was greatly diminished. I have not lost a plant.

A PRACTICAL GARDENER.

LARGE STRAWBERRIES.

We have seen many accounts of large Strawberries, but none to compare with one grown in the garden of C. M. Lee, Esq. of this village, measuring *seven and a quarter inches* in circumference. We think we may safely challenge the country to produce its equal. The following certificate is signed by men of the first respectability in Rochester:

We certify that we have this day accurately measured a Strawberry, from the garden of C. M. Lee, Esq., which was seven and one-fourth inches in circumference.

EBENEZER WATTS,
H. B. WILLIAMS.

June 19, 1833.

Extract of a letter from W. A. HART, *Esq. Fredonia, to* ALEXANDER GORDON, *Rochester Nursery.*

"I noticed an inquiry some time ago in the Genesee Farmer, of the best means to destroy the green louse on plumb trees, &c. My own trees were visited this season by those destructive pests. I took some strong soap suds, and by means of a syringe I threw the suds into the trees. This had the desired effect, for on examining the trees two days afterwards, I found it had killed every insect, and had turned them perfectly black."

ERRATA.

Page 162, column 2, line 27, for *are* read *and*.
163, column 1, line 43, for *set* read *sat*.

HIGHWAYS--No. VI.

At the time when our roads in the Genesee Country were *cut out*, or soon after, in mucky places logs were laid cross-wise, side by side, to prevent the cattle and wheels from being *swamped;* for the latter was very properly considered a greater evil than to go bouncing over a "corduroy road," at a very slow gait. In some parts a little earth was thrown over them, which soon settled down between, making the passage scarcely easier for the wheels, but allowing much better foot-hold for the cattle.

I am not disposed to complain of our hardy pioneers, nor to institute an inquiry whether fine brush would not have been preferable; but the same reasons in favor of log causeways, no longer exist. Many of these which were drawn into the roads more than thirty years ago, still remain as bars to all comfortable traveling; and it is time that the attention of our overseers of highways, was directed to the removal of such nuisances. It is preposterous to think of effectually covering them up by the common process of road mending. They have often been covered, and yet, before the close of the year, in almost every case that I have seen, it is necessary to check the gait of all light carriages on approaching them. It is presumed that Commissioners of Highways, as superior officers, are qualified to give directions to path-masters in regard to every thing that relates to the improvement of the roads; and I would suggest to such officers the propriety of visiting all the districts in their respective towns at least twice a year, observing in what manner the taxes assessed for this purpose can be most judiciously applied. The effect of such visits must be beneficial. Every person—no matter who—man or boy—will be more faithful, when it is known that a close inspection is to follow. Roads are too commonly considered as unworthy of the oversight of our influential citizens; and the repairs are too often solely entrusted to overseers who have never reflected on the subject, and who have no ambition but to make their *returns* at the end of the year.

VIATOR.

☞A meeting of the Executive Board of the *Onondaga Agricultural Society* was held on the 30th May, when an Address was delivered by DAN BRADLEY, Esq., President of the Society, and a series of spirited resolutions adopted, which have come to hand in the Onondaga Standard. We shall publish them in our next number.

☞"*Credit.*"—During the past week we have noticed in our exchange papers no less than *thirteen* articles copied from the Genesee Farmer, without the proper *credit.* In the *Farmer's Chronicle*, of June 13, (a very excellent paper by the way, about one half of it being devoted to Agriculture) we find four articles, following each other in the "Agricultural Department," copied from this paper, without any acknowledgment of the source from which they were derived.

INQUIRIES.

Will you, or some correspondent, inform us of the best modes of preparing Cauliflowers for the table? Does Okra succeed in Genesee? E. N.

☞ Several communications intended for this paper are necessarily deferred till next week.

PEARS.

Some hundreds of new and valuable varieties of this fruit have been brought into notice within the last twenty years, by the Pomologists of Belgium, France and England. "A knowledge of the excellence of these new kinds," says the L. H. Catalogue, "has occasioned a great number of the old sorts, formerly reckoned very good, to be now marked as only second rate." These of course will not be found in the following list, which embraces none but the first quality. The climate of the American Flanders, (the climate of the Genesee country generally,) is believed to be very similar to the climate of European Flanders, where most of the new pears have either originated, or been successfully cultivated. Hence these Pears are believed to be as hardy as the old varieties; a conclusion which a partial experience in their culture in this country seems fully to warrant. Those marked as proper for wall fruit alone may form an exception.

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The abbreviations are as follows:

1. *Prevailing color.* p. pale; d. dark; b. brown; y. yellow; r. red; g. green; rus. russet.

2. *Form.* Pyr. pyriform; obt. pyr. obtuse pyriform.

3. *Size.* 1. large; 2. middle; 3. small.

4. *Texture.* C. Crisp; B. Buttery; J. juicy; T. tender, such as are softer than the crisp, yet not as good as the buttery.

Quality. 1, first rate; 2, second rate; 3, indifferent, or bad. [As we give only those named as first rate, we omit the column indicating the quality.]

Situation. W. wall; S. standard.

[Those with this mark * have been introduced into the Albany Nursery, mostly from the London Horticultural Society's Garden.]

TABLE USE.

No.	Names.	Color.	Form.	Size.	Tex.	Sit.	Season.
14	*Ambrosia *Early Beurre*	g. r.	roundish	2	B	S	Sept.
26	*Aston Town	y.g.b	roundish	3	B	S	Oct. Nov.
37	*Belle et Bonne *Gracieuse*	g. y.	roundish	1	B	S	Sept.
46	*Bergamot, Autumn *a* *Common Bergamot* *York Bergamot* *English Bergamot*	g b.r	round	3	J	S	Oct.
50	*Bergamot, Gansel's *b* *Brocas Bergamot* *Ives's Bergamot* *Staunton—Gurle's Beurre.* *Bonne Rouge—Diamant*	y. b	flatly ob.	2	B	W	Oct. Nov.
78	*Bergamot, Suisse *c*	g. y.	roundish	2	B	W	Oct.
81	*Beurre d'Amalis	g. b.	obovate	1	B	S	Sept.
84	*Beurre d'Aremberg *d* *Duc d'Aremberg—Deschamps* *L'Orpoline*	ρ. b.	obovate	2	B	WS	Dec. Jan.
85	Beurre d'Argenson	y. b.	pyr	1	B	S	Nov. Dec.
89	Beurre Beauchamps *Beauchamps*	b. r.	roundish	2	B	S	Nov.
91	*Beurre, Bosc *e* *Calebasse Bosc-Beurre d' Yelle,* (of some)	b.	obovate	1	T	WS	Oct. Nov.
93	*Beurre Brown *f* *Beurre Rouge—B. Gris—B. Dore—B. Vert—Beurre--Golden Beurre—Red Beurre-B. duRoi—Badham's—B.d' Anjou—B. d'Ambleuse—B d'Amboise--Isambert--Isambert le Bon*	b.	obovate	1	J	W	Oct.
95	*Beurre de Capiaumont *Capiaumont—Beurre Spence (of some collections)*	b. r.	obovate	2	B	S	Oct.
97	Beurre Crapaud	ρ. g.	obovate	2	B	S	Oct. Nov.
99	*Beurre Diel *g* *Diel—Diel's Butterbirne—Dorrothee Royale—Beurre Royal—Des Trois Tours—Beurre d' Yelle—Gros Dillen—Dillen—De Melon—Double Phillips*	y. b.	obovate	1	B	WS	Oct. Nov.
101	Beurre Duval	ρ. g.	ob. pyr.	2	B	S	Nov.

a Excellent for stewing—*b* Excellent—*c* Striped with green and yellow—*d* Very excellent; leaves deeply serrated—*e* Excellent—*f* Varies much according to the soil and situation—*g* Hardy; great bearer; excellent; deserves extensive cultivation; branches to be well thinned.

No.	Names.	Color.	Form.	Size.	Tex.	Sit.	Season.
102	*Beurre, Easter *e* *Berg. de la Pentecote-Beurre de la Pentecote—B. d'Hiver de Bruxelles—Bezi Chaumontel tres Gros-Chaumontel tres Gros—Doyenne d'-Hiver—Doyenne du Printemps—Canning-Seigneur d'Hiver-Philippe de Paques*	g. b.	obovate	1	B	WS	Jan. Mar.
111	*Beurre Rance *b* *Beurre Epine—Hardenpont du Printemps*	b. g.	obt. pyr.	2	B	WS	Mar. May
116	*Beurre Spence *c*						
117	Beurre Van Mons	rus.	pyr	2	B	S	Nov.
122	*Bezi de la Motte *Bein Armudi-Beurre Blanc de Jersey*	b. g.	roundish	2	B	WS	Oct. Nov
123	*Bezi Vaet *d*	y b.	obovate	2	B	WS	Dec. Jan.
125	*Bishop's Thumb *Rousseline, (of some)*	b. r.	oblong	1	J	S	Oct.
139	Bon Chretien, Fondant *e*	g. b.	oblong	1	J	S	Oct. Nov.
162	Burgermeester	b rus	pyr	2	B	S	Nov.
165	Caillot Rosat, English	g.b.r	obt pyr	1	J	S	Aug
182	*Chaumontel *f* *Bezi de Chaumontel—Beurre d'Hiver—Winter Beurre—Oxford Chaumontel.*	y. b.	oblong	1	B	WS	Nov. Mar.
190	*Citron des Carmes *g* *Madeleine-Rose Angle, Early*	y. g.	obovate	2	J	S	July.
196	*Colmar *h* *D'Auch—De Manne—Colmar Dore—Incomparable*	g.y.b	obt pyr	2	B	W	Nov. Feb.
197	*Colmar, Autumn *i*	p. g.	obt pyr	1	B	S	Oct.
209	Comte de Lamy *j*	p.y.r	obovate	2	B	S	Oct.
217	*Crassane *Bergamotte Crassane—Crasane*	g. b.	roundish	1	J	W	Nov. Dec.
224	*Crassane, Winter *k*	g.y.b	turbinate	1	B	S	Jan.
233	*Delices d'Hardenpont	b. y.	ob pyr	2	B	WS	Nov.
248	Downton *l*	y. b.	pyr	2	J	S	Jan. Feb.
250	*Doyenne Gray *m* *Doyenne Gris—Red Doyenne—Gray Dean's-Doyenne—d'Automne-Doyenne Rouge--Saint Michel Dore—-Red Beurre—Beurre Rouge*	rus.r	obovate	2	B	S	Oct. Nov.
255	*Doyenne White *n* *Doyenne Blanc—White Beurre--White Autumn Beurre—Dean's-Snow Pear-Pine Pear—Warwick Bergamot-Beurre Blanc—Saint Michel-Poire de Limon-Poire Neige—Poire de Seigneur-Bonne-ente-A Courte queue—Monsieur-Citron de Septembre—Valencia—Kaiserbirne--Kaiser d'Automne—Beurre de Roi—Passe Colmar d'Autumne-Vergaleuse (of N. York)*	p. y.	obovate	2	B	WS	Sept. Oct.
260	*Duchesse d'Angouleme *o*	b. y.	obt obov	1	B	WS	Oct. Nov.
261	Duchesse de Mars	y b.	obovate	2	B	S	Nov.
269	*Echasserie	g. b.	roundish	2	B	S	Nov. Jan.
279	Famenga *p*	g.y.b	obovate	2	J	WS	Sept.
283	Figue de Naples	b r.	oblong	1	B	S	Nov.
286	*Flemish Beauty *q* *La Belle de Flandres-Bouche Nouvelle-Fondante du Bois—Brilliant—Imperatrice de France--Bosch*	rus.r	obovate	1	B	S	Sept. Oct.
288	*Fondante du Bois *r*	g. y.	obovate	2	J	S	Dec. Feb.
295	Fondante Van Mons	p. y.	roundish	2	J	S	Nov.
297	*Forelle *s* *Poir Truite—Forellenbirne*	y g.r	obovate	2	B	WS	Nov. Jan.
299	Forme de Delices	y.rus	obovate	2	B	S	Oct Nov.

a Hardy and a good bearer; one of the most valuable spring pears yet known; its cultivation strongly recommended—*b* The best very late sort yet known; bears well, and is truly valuable—*c* Not fruited, but said to be excellent—*d* Resembles the Chaumontel—*e* Tree hardy; good bearer; a very excellent pear—*f* Succeds well trained *en* quenouille—*g* A good bearer and one of the best early pears—*h* One of the old pears—*i* Bears well—*j* Excellent—*k* A good bearer—*l* A good bearer—*m* Keeps better than the White Doyenne—*n* A good bearer, and excellent; should be gathered before quite ripe—*o* Very large, and good bearer—*p* A Portugal Pear; very good—*q* Must be gathered early—*r* Resembles the Passe Colmar—*s* Beautifully speckled like a trout; flesh tender.

No.	Names.	Color.	Form.	Size.	Tex.	Sit.	Season.
306	*Franc Real, Summer *a* *Franc Real d'Ete—Fondante—Gros Micet d'Ete*	y. g.	obovate	2	B	S	Sept.
308	Garnon's	y. g.	oblong	1	B	S	Jan.
310	*Gendeseim *b*	p g.y	obt. pyr.	1	B	S	Oct Nov.
314	*Glout Morceau *c* *Golux Morceaux——Beurre d'Hardenpont—Hardenpont d'Hiver—B. d'Aremberg—(of some)-Got Luc de Cambron—Linden d'Automne-Roi de Wurtemberg*	p. g.	ob. clip.	1	B	W S	Nov. Jan.
321	*Grande Bretagne Doree d'Hiver *Grand Bretagne Doree Fondante*	r.rus	pyr.	2	B	S	Oct. Dec.
350	*Henri Quatre *d*	y. g.	pyr	2	T	S	Sept. Oct.
353	Hessel *e* *Hazel*	b.	obovate	2	J	S	Sept.
375	*Incomparable, Hacon's *f* *Downham Seedling*	b. g.	roundish	1	B	S	Oct. Nov.
388	*Jargonelle *g* (of the English) *Epargne—Grosse Cuisse Madame*	y. b.	pyr	1	J	W S	Aug.
417	*Longueville	g.rus	obovate	2	B	S	Sept.
419	*Louise Bonne *h* (of Jersey)	g.b.r	pyr	1	B	S W	Oct.
431	*Maria Louisa *i* *Forme de Marie Louise—Marie Chretienne—Braddick's Field Standard*	b. y.	oblong	1	B	S	Oct. Nov.
448	Monarch, Knight's *j*	y. b.	obovate	2	B	S	Jan.
466	Muscat Robert *k* *Poire a la Reine—Saint Jean Musque Gros-Early Queen*	g. y.	turbinate	3	T	S	July.
469	*Napoleon, *l* *Medaille—Sucre Dore—Ch's. d'Autriche—Wurtemberg—Roi de Rome*	p. g.	obt pyr	1	J	W S	Nov. Dec.
470	*Nelis, Winter *m* *Nelis d'Hiver—Bonne de Malines—La Bonne Malinoise*	y. b	obovate	2	B	W S	Dec. Jan
471	*Ne plus Meuris *n*	b.rus	roundish	2	B	S	Nov. Mar.
492	Parmentier *o*	r.	obovate	2	B	S	Oct.
493	*Passans de Portugal *p*	p. b.	oblate	2	J	S	Aug. Sept.
494	Passatutte	g. y.	obovate	2	J	W	Nov. Dec.
495	*Passe Colmar *q* *Passe Colmar Epineux—Colmar Epineux—Passe Colmar Gris—Passe Colmar Gris dit Precel——Beurre Colmar Gris dit Precel—Precel—Fondante de Panisel—Fondant de Mons—Colmar Hardenpont-D'Ananas—Present de Malines-Marotte Sucre Jaune—Souveraine——Colmar Souveraine—Chapman's*	p. b.	obo or obt pyr	1	B	W S	Dec. Jan.
506	Pitfour	b.	obovate	2	J	S	Oct. Nov.
530	Rouse Lench *r*	p. g.	oblong	1	B	S	Jan. Feb.
539	*Rouselet de Rheims *s* *Rousselet Petit—Rousselet Spice, (of some)*	b. r.	pyr	3		S	Sept.
552	*Saint Germain *Inconnue la Fare-Saint Germain Gris—Saint Germain Jaune*	y.g.b	pyr	1	J	W	Nov. Jan.
560	Saint Ghislain	p.y.g	pyr	3	B	S	Sept.
588	*Seckle *t*	b. r.	obovate	3	B	S	Oct.
593	*Sieulle	p. y.	oblate	2	B	S	Oct. Nov.
608	*Sucre Vert *u* *Green Sugar*	g.	obovate	2	J	S	Oct.
611	*Summer Rose *v*	rus.r	oblate	1	J	S	Aug.
612	Super-Fondante *w*	p. y.	obovate	2	B	S	Oct.
616	*Swan's Egg *x*	g. b.	obovate	2	J	S	Oct.
629	Thompson's *y*	p. y.	obovate	2	B	S	Nov.
642	*Urbaniste	p. g.	obovate	2	B	W	Oct.
643	*Vallee Franche *z* *De Vallee*	y. g.	obovate	2	J	S	Aug. Sept.

*a*A good bearer; succeeds the Jargonelle—*b*Good bearer and hardy—*c*Hardy; good bearer; excellent; hangs late on the tree—*d*Good bearer—*e*Great bearer—*f* Hardy; good bearer; excellent—*g* The best of its season—*h*Very handsome—*i*One of the very finest; bears well—*j*Hardy; good bearer—*k*Good early pear—*l*Vigorous tree; good bearer; fruit excellent, very juicy—*m*Excellent—*n*One of the best late pears—*o*Streaked with bright red—*p*Great bearer—*q*Free from canker; hardy; great bearer—*r*Great bearer—*s*Peculiarly rich and sugary; dries well—*t*Peculiarly rich aroma—*u*Tree vigorous; bears well—*v*Handsome—*w*Resmbles the White Doyenne—*x*Good bearer—*y*Flavor of Passe Colmar—*z*Good bearer.

No.	Names.	Color	Form.	Size.	Tex.	Sit.	Season.
658	*Virgouleuse *a* *Poire Glace—Chambrette—Bujaleuf*	y. g.	obovate	1	B	S	Nov. Jan.
668	Welbeck *Welbeck Seedling*	y.r's	obovate	1	B	W	Sept.
669	Whitfield *b*	y. b	obovate	2	B	S	Nov.
674	Wormsley Grange	y. b	oblong	2	B	S	Oct.
	KITCHEN USE.						
41	*Bellissime d'Hiver *c* *Teton de Venus—De Bur—Belle Noisette*	b. r.	roundish	1	C	S	Nov. Apr.
42	Belmont *d*	p.y.b	obovate	1	J	S	Nov.
45	Bequene Musque *e*	y	oblong	2	C	S	Nov. Jan.
120	*Bezi d'Heri *f* *Bezi Royal—De Bordeaux*	b. g.	obt pyr	2	C	S	Oct. Dec.
141	*Bon Chretien, Spanish *g*	y. r.	pyr	1	C	SW	Nov. Dec.
177	Chaptal	b.	obovate	1	C	S	Dec. Apr.
305	*Franc Real d'Hiver *h* *Franc Real—Fin Or d'Hiver*	b. y.	roundish obovate	2	B	S	Sept.
559	*Saint Germain, Uvedale's *i* *Uvedale's Warden—Pickering Pear-Pickering's warden—Union—Lent Saint Germain*	g. b.	pyr	1	C	W	Jan. Apr.
	PERRY PEARS.						
32	Barland	g.rus	obovate	1			
599	Squash, Teinton *j*	g.rus	obovate	1			

*a*Tree vigorous, but shy bearer—*b*Great bearer—*c*A good stewing pear; bears well—*d*Great bearer—*e*Excellent for stewing—*f*Excellent stewed—*g*Good bearer; excellent pear—*h*Stews tender; of a br. purple color—*i*Has weighed more than two pounds—*j*Much esteemed as a perry pear.

We do not, at present, call to mind any valuable American Pear, not noticed in the Catalogue, except the *Dix* and *Stevens' Genesee*, both of which are autumn fruits, and deserve a place in the first class of Pears.

EXPERIMENTS IN FEEDING.

[From the Transactions of the Highland Society.]

Report of Experiments on the comparative advantages of Feeding Stock with Mangel-Wurzel, Turneps and Potatoes. By Mr. Andrew Howden, *Lawhead, East Lothian.*

In compliance with your wish, I now send you the results of an experiment which I have been conducting during the past winter, and in which mangel-wurzel has been used to the extent of two acres—partly by itself, and more extensively as a mixture with ruta baga and potatoes, in feeding cattle. Having been in the practice of cultivating annually from one to three acres of mangel-wurzel for ten or twelve years past, during which I had read and heard much on the subject of its value, compared with turneps and potatoes, and observing that the Highland Society were making this an object of interest, I resolved to attempt something which would satisfy myself upon a subject which I considered of importance; and with the intention also of communicating to the Highland Society the results of my experiment, should I be able to deduce any thing seemingly useful from it. With this end in view, I set about planting three Scotch acres of good, dry, free land, with mangel-wurzel of the red sort, six pounds to the acre. The land had been previously occupied by a crop of oats after hay, upon which a full dressing of sea-weed was laid. It was deeply ploughed in autumn, and got two spring furrows, the last across. On the afternoon of the 16th of May, I began planting the seed in the following manner:—The land was ridged in the same way as for turnep, and in the drills were spread from eighteen to twenty tons of good farm-yard dung. Immediately upon the dung being covered by the plough, the drill barrow was regulated so that its coulters should leave an open cut of about two and a half inches deep. Into this the seed (which had been steeped in lime water a week before) was put, at a foot distance. Much attention ought to be paid to putting in the seed. The length of the drill being measured, the women who are to plant should have equal shares of the distance laid off, the shorter the stretches the better, as a plain roller should instantly follow to close in the earth above the seed, which ought to have been pressed into the bottom of the cut by the thumb of the planter. I repeat, that without strict attention to this, there is much chance of having on unequal braird. It is true the roots transplant like a cabbage, but I prefer the plants found in the seed row at first; indeed a complete justification of this opinion was afforded in the present instance. On the 16th, while the laborers were engaged in the work, I attended closely to them, but business calling me from home on the morning of the 17th, I gave strict charge to a confidential man that he should see the work performed with the same precision. Notwithstanding this injunction, there were many more blanks in the one acre planted by him, than were in the two others. Upon these blanks being filled up, the plants put in were watered with about fifteen puncheons from a cess-pool into which the washings of the dung-pits run. It was applied in about equal shares two separate afternoons, and a hole having been first made by

the dibble near to the plant, it received and retained a quantity of the liquid until it was gradually absorbed. Having so minutely observed upon this part of the process, I shall only mention, that the crop should be ploughed and hoed in a manner very similar to a drilled crop of turneps,—and this is now generally understood throughout Scotland. In this way did I proceed, and with such management the crop was distinguished by uncommon luxuriance.

Seeing about the beginning of August that a good many of the plants were running to seed, I had them drawn and given daily as the food of two bulls which were confined in the house. Towards the end of harvest I began to take off the outside leaves and give them to the milch cows, by which I rather think the growth of the roots was checked. The leaves beginning to fade about the 1st of October, I daily cut completely over a regular portion of them, which were given to cows and young sheep promiscuously. On the 2nd of November, I sent a portion of the leaves to be weighed, and the land having been previously measured, I found the weight of leaves per acre, to be 10½ tons. We next proceeded to weigh a portion of the roots, which gave a return of twenty-five tons 1 cwt. The crop was now taken up by the plough, and stored in separate acres with perfect exactness.

But I must here attempt more distinctly to bring into view the object sought for, and the manner of obtaining it, although I am aware that a detail of facts and circumstances, drawn up by one so little accustomed to write as I am, is not likely to to be satisfactory. The object sought for by me, then, was the knowledge whether three acres of land produce in beef would be the greatest from a crop of Swedish turneps, of mangel-wurzel, or of potatoes. To attain this knowledge, I caused a surveyor to lay off five acres of Swedish turneps, two acres of mangel-wurzel, and two of potatoes. It has been already stated that the mangel-wurzel produced twenty-five tons; and by the same steelyard, the weight per acre of Swedish turneps was twenty-eight tons; while the produce of potatoes per acre was 73 balls of 4 cwt. each, or fourteen tons twelve cwt: all of which I think very full crops.

The produce being stored in three separate lots, I tied up twenty-one cattle of six quarters old, bred by myself, seven of which, designated No 1, were put to consume one acre of swedish turneps, one acre of mangel-wurzel, and one acre of potatoes. The remaining seven designated as No. 3, were to consume two acres of Swedish turneps, and one acre of mangel-wurzel. The whole of the lots were at first allowed a few distiller's grains, and a little straw throughout. I should here remark, that only about one half of the ruta baga was taken up and stored at first; and the whole of the mangel-wurzel was stored in an untrimmed state.

It is worthy of notice, that the situation to be chosen for storing is of great consequence. I had the mangel-wurzel intended for the feeding stock put up in separate acres, about forty feet from the feeding shed, which protected the store from the prevailing west wind. The other acre's produce, set apart for the milch cows, was built up in a separate heap, the same width at bottom as the other lots (seven feet); but from exposure, having only a moderate covering of straw or thatch. the roots upon the west side, towards the month of March, lost their juices, and I think their feeding quality. In other years, I have seen loss occasioned by too great a body of roots being heaped together, when they fermented and spoiled.

In following out this experiment, I have taken up an opinion, that upon good land, in an early situation, mangel-wurzel can be grown to advantage, and given as a mixture of food in fattening cattle. In its use, a circumstance occurred which I shall mention. In the lot of cattle No. 2, the food of which consisted of Swedish turneps and potatoes, one of the number was often swelled to such a degree, as to make me fear I should lose the animal. Salt and water, oil, &c., were repeatedly used, but by no means with speedy relief. I directed the feeder to introduce among his food four roots of mangel-wurzel daily. While this was continued the beast never swelled. I withdrew it and the animal became tumefied as before. I again gave back the mangel-wurzel, and for a month there has been no appearance of swelling. Variety seems gratifying to the appetite of even the inferior animals, and for this reason a mixture of food seems preferable.

The effect in the present case may not be altogether satisfactory, because the cattle taken to show it were not all bred from the same stock. I must now explain, that on a measurement taken on the 30th of January, I immediately took a pair of cattle out of every seven, and confined them to one particular species of food. To one pair, lot No. 1, I gave potatoes and water, to another pair of lot No. 2, I gave Swedish turneps; and to another pair, of lot No. 3, I gave mangel-wurzel. I refer to the tabular statement of the monthly increase of girth, which does not indicate any great superiority; but some good judges say the mixtures have a decided preference, and, next to a mixture, the particular food of Swedish turneps is preferable.

So much for fattening, and now for the dairy. I have mentioned that one acre of mangel-wurzel was put in store for the milch cows, of which I have seven; five of these got a very small quantity to keep them fresh—the other two were allowed as much as they were disposed to eat. This, however, was not the case for the first ten days—as mangel-wurzel and potatoes ought to be given at first in small quantities, for they both operate too powerfully as a purgative, and the mangel-wurzel as a diuretic. The two cows put to a full allowance, had calved at mid-summer, and were not again in calf. I wished to try if they could be fed and milked at the same time. One of them has been sold fat, and the other, I may say, is fat also—but they had draft along with the mangel-wurzel. Their produce throughout the time has been four Scotch pints each, per day; this was sold at three pence per pint; and as I have seen that without draft each cow will produce one shilling's worth of milk for every hundred weight of roots (and perhaps of leaves) consumed, in this way the milk from such a crop would realize 35*l.* per Scotch acre. This to me seems a startling sum—but I give the facts, as I have repeatedly seen the cows milked.

As a summary of this lengthened detail, it seems to me that the food for cattle, whether raised from the land in the shape of Swedish turneps, potatoes or mangel-wurzel, is not materially different, provided the crops are alike good of their kind. A less quantity and inferior quality of manure, will produce the potatoes even on land where the soil and climate are not so favorable; but I have ever seen at the end of a rotation, the land upon which potates had been grown in the worst condition, and to obviate this, it is of use, I think, to cultivate a variety which covers well in a drill. This is a subject to which I mean to give my attention this season, seeing the Society's premium offered.

I now subjoin a table of the monthly increase of the several lots of cattle, and shall be glad if it is thought to contain any thing in the least useful.

Table of the monthly girth of three lots—each lot consisting of seven beasts.

Date. 1831--2.	Lot No. 1—Food. 1 acre of potatoes 1 " mangel-wurzel 1 " Swedish turnep		Lot No. 2—Food. 1 acre of potatoes, 2 " Swedish turnep		Lot No. 3—Food. 1 ac mangel wurzel 2 " Swedish turnep	
Nov. 30	35 feet	8 inches	35 feet	9 in.	35 feet	8 in.
Dec. 30	36 "	6 "	36 "	7 in.	36 "	6 in.
Jan. 30	38 "	2 "	38 "	4 in.	38 "	2 in.
Mar. 1	39 "	7 "	39 "	8 in.	39 "	6 in.
" 30	40 "	8 "	40 "	10in.	40 "	6 in.
April30	41 "	4 "	41 "	7 in.	41 "	3 in.

Twenty-eight tons of Sweedish turneps and mangel-wurzel withdrawn, and used for other cattle, having still in store one month's provision for twenty-one cattle.

Girth of pairs of each of the above lots, put upon different food 30th of Jan.

Date. 1832.	Lot No. 1. Potatoes	Lot No. 2. Swed turnep	Lot No. 3. Mang-wurzel
Jan. 30	10 feet 8 inc.	10 feet 5 inc.	10 feet 4 inc.
April30	11 " 6 inc.	11 " 3 inc.	11 " 2 inc.

The cattle have been sold, and the purchasers agree in opinion, that the lot of seven fed on Swedish turneps are from 7*s* to 10*s* a head better than the other lots. The average advance upon the original value of each is 6*l.* 12*s.*; and the cost of grain being deducted, there remain 120*l.* in return for the eight acre's produce consumed. I am aware that this is liable to be doubted, in such a year, and the produce is certainly much beyond that of any other part of the lands possessed by me.

It ought to be stated that the mangel-wurzel was stored in an untrimmed state. When the roots and earth which adhere are taken away, the loss of weight may be greater than I imagined. In hazarding an opinion of the return which it would make in milk, I made no allowance for this.

I am inclined to think, that less attention has been paid to selecting a good kind of mangel-wurzel than has been bestowed on either turneps or potatoes, as I noticed in the crop under this experiment a very striking disproportion in the weight, two or three roots weighing 10 lbs. or 12 lbs standing together, while those adjoining could scarcely be said to have roots at all.

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Note by the transcriber.—Mr. Howden has omitted to state the expense of cultivating the different crops. Although I have no correct data to supply the defect, I will state why I consider the advantage decidedly in favor of the Swedish turneps. 1. The mangel-wurzel and potatoes occupy the ground the entire season; the ruta baga does not, but may be grown upon a clover lay, after the grass has been cut. 2nd. The mangel-wurzel, being sown in the spring, when vegetation is tardy, does not germinate with the certainty, or grow with the vigor that ruta baga does when sown at mid-summer; and consequently it requires much more labor in hand weeding, and is liable to more vacancies in the drills, than the turnep: and compared with the potatoe, the turnep is gathered with a fourth of the expense of the potatoe. Hence the turnep has the advantage of gaining a crop from the soil, and saving, in my opinion, one half the expense of cultivation. The tops are as abundant and as nutritious as those of the mangel-wurzel, and the roots may be kept as late as either in the spring. The ruta baga has been considered inferior in product in Pennsylvania and New Jersey, to mangel-wurzel; but this I ascribe to climate. Here it is, however, a certain and abundant crop, on soils adapted to its culture, and with proper management. B.

FINE STOCK FOR SALE.

THE celebrated bull *Eclipse*, out of the famous cow *Princess*, imported by G. W. Featherstonhaugh Esq. of Duanesburgh, sire a North Devon, imported as above. *Eclipse* is large, of a beautiful mahogany color, in girth seven and a half feet, and his weight in 1831, (when last weighed) was rising of 2200 lbs. On his way to the West, he became foot sore, and was left on the premises of Col. Mills, at Newsted, Erie co., where he may be seen. He will be sold on liberal terms or leased for one year.

The subscriber has now on hand several very promising young Bulls and Heifers, thorough bred, got by his fine Durham Bull *Admiral*, which he will sell on good terms, and a credit given if required, on interest, for approved notes. For the terms of sale for *Eclipse*, inquire either of Col. Mills, or the subscriber.

L. JENKINS.

Canandaigua, June 20, 1833. J22.f3t

FARM REPORTS.

(Concluded from page 191.)

Cheese Making.—The cheese-tub being put in its place in the dairy, the ladder is put across it, and a large thin canvass cloth covers the whole tub and ladder to catch any of the milk that may drop from the pail, and to prevent dirt from falling into the tub. Above this and upon the ladder is placed the sieve, through which the mik lis strained. If the milk should not be of the temperature of 85°, a portion of it is put into a deep tin, kept for the purpose, and placed in a furnace of hot water in the wash-house, by which means the whole is warmed to a proper degree. It is of the utmost moment to attend to this; for if the milk is not warm enough when the rennet is put into it, the cheese will be 'tender,' and will bulge out in the edge, which spoils its appearance, and a great quantity of sediment of small curd will be found in the whey leads, which is so much curd lost. If, on the other hand, the milk is too warm, it will cause the cheese to 'heave' or ferment, which injures both its appearance and quality.

When the milk is sufficiently warm, the coloring and the rennet are put into it. The coloring or anatto is put in by rubbing a cake of it on a plate amongst the milk until, from its appearance, it seems colored enough. One pound of anatto, at five shillings, is sufficient for half a ton of cheese.

The rennet being added immediately after the anatto is put in, the tub is covered with a woollen cloth for, at least, an hour. Rennet or runnet is made from the stomachs of calves, called here 'vells.' Irish vells are the best: they are cured, and sent to England, and sold by the grocers to the dairy-farmers. Mrs. Hayward never uses them till they are twelve months old, for, if they are not old, the rennet made from them causes the cheese to 'heave,' and to become full of 'eyes' or holes. She prepares the rennet from them by adding to every six vells two gallons of brine and two lemons. The lemons do away with any disagreeable smell, and give the rennet sweetness and agreeable flavor. Twenty or thirty gallons of it are made at a time, as it is found to be much better, when made in large quantities. It should never be used, till it has stood for, at least, two months.

When the curd is sufficiently firm for breaking, it is gently and slowly cut with a three-bladed knife, down to the bottom of the tub, (the knife being about fourteen inches long,) both ways or at right angles, and around the sides of the tub. The cuts should be about an inch apart. When it has stood five or ten minutes to allow it to sink a little, and the whey to come out as clear as possible, some of the whey is dipped out of it with the bowl, and the curd is cut a second time with the three-bladed knife—very slowly to begin with; for, if the cutting is done hurriedly, a great sediment of very small curd will pass through the sieve and be found in the whey leads, and there will also be an increase of the quantity of whey butter which should have been in the cheese, and the value of the butter, thus obtained, will not compensate for the waste of curd, and for the loss of credit which the cheese will sustain from the abstraction of butter from it. The cutting being, therefore, performed very slowly at first, and with the strokes of the knife at a considerable distance from each other, is gradually quickened, and the strokes are taken nearer and nearer every time. At last, one hand, with the skimming dish, keeps the whole in motion, turning up the lumps suspended in the whey, while the other, with the knife, is in constant motion, cutting them as small as possible—and this operation is continued till no more lumps are brought to the surface, and the whole mass is reduced to one degree of fineness. This process may occupy a quarter of an hour.

The curd is now allowed to stand a quarter of an hour, and being, thus, sufficiently settled, the whey is taken from it with the bowl, and poured through a very fine hair sieve, placed over the whey leads. When the greatest part of the whey has been separated from it, the dairy-maid, folding over a portion of it, and beginning at one corner, goes around the tub, cutting the curd into lumps, and laying them on the principle mass, by which operation the mass is carried all around the tub, and most of the remaining whey escapes between the cut fragments, as they lie and press upon each other. From time to time the whey is taken from the tub, and put through the sieve into the whey leads.

The curd is then put into vats, and pressed down with the hand. The vats being covered with cheese-cloths, about one yard and a quarter long, of fine canvass, are placed in the press for half an hour, when they are taken out and the curd cut into slices, and put into a mill fixed on the top of the tub, which *tears* it into very small crumbs, as small as vetches. This mill, which is of Mr. Hayward's construction, is a great improvement in the making of cheese, not only as it saves the dairy-maid the most laborious part of the process, that of squeezing and rubbing the curd into small crumbs with her hands, but as it allows the fat to remain in the cheese, which the hands squeeze out.

In its pulverized state, it is customary with most dairy-maids to scald the curd with hot whey; but Mrs. Hayward considers cheese richer, when made without scalding the broken curd, this washing the fat out of it. She therefore, without scalding it, puts it into the vats, and presses it closely together with the hand, in filling them.—In making double Gloucester cheeses, particular care is taken to press any remaining whey from the curd as the vats are being filled, and they are filled as compactly as can be done with the hand, being rounded up in the middle, but just so much so, as that the whole can be pressed into the vat. Cheese-cloths are then spread over the vats, and a little hot water is thrown over the cheese-cloths, which tends to harden the outside of the cheese and prevent it from cracking. The curd is now turned out of the vats into the cloths, and the vats being dipped into the whey to wash away any crumbs of curd that may cling to them, the curd, inverted and with the cloth around it, is again put into them. The cloths are then folded over and tucked in, and the vats, as they are filled, are put into the press one upon another. The bottoms of the vats are smooth and a little rounded, so as to answer the purpose of cheese-boards, which, therefore, are only wanted for the uppermost vats, or when the other vats are not quite full. The vats are allowed to remain under the press about two hours, when they are taken out and dry cloths are applied, which with double Gloucester cheeses should be repeated some time in the day.

Salting and Salting-Presses.—The vats, when the clean cloths are given, as just mentioned, are changed from the single press to the one next to it, and placed in it, one upon another, as before. They remain in this press till the cheeses are salted, when those made in the evening take the place, in the press, of those made in the morning, and those made in the evening are, in their turn, displaced by those made the following morning, the cheeses of the last making being always placed lowest in the press, and those of the other makings rising in it according to the priority of making. The same order is observed in the other two presses, the last or newest making in each being lowest, and each making having next above it that which was made last before it. The cheeses pass through the three presses in the same order, advancing a step in their progress at each 'meal' or making, till, at last, in four or five days, they come out of the presses and are put upon the shelves. They are generally salted at the end of twenty-four hours after they are made, though this is done by some at the end of twelve hours. The salting should never be begun till the skin is all closed, for if there be any crack in the skin of the cheese at the time of salting, it will never close afterwards. The salting is performed by rubbing with the hand both the sides and the edge of the cheese with finely powdered salt. The cheese, after this, is returned to the vats, and put under the press, care being always taken, according to what has been said, to put the newest cheese lowest in the press, and the oldest uppermost. The salting is repeated three times with the single, and four times with the double Gloucester, twenty-four hours being allowed to intervene between each salting. After the second salting, the cheeses are returned to the vats without the cloths, that the marks of the cloth may be effaced, and the cheese may get a smoothness of surface and 'keenness' of edge, which is a peculiarity of Gloucestershire cheese. The double Gloucester remain in the presses five days, and the single, four; but in damp weather they should remain longer. The quantity of salt generally used is about three pounds and a half to a cwt. of cheese.

The Cheese Room.—When the cheeses are taken from the salting-presses, they are put on the shelf in the dairy for a day or two, where they are turned once in twelve hours. They are then taken to the cheese-loft to make way for the new ones. In the cheese-room, either on the floor or on the 'cheese rack,' they are turned once every day; and, in general, in a month from the time they were taken out of the vat, they are ready for cleaning, which is done by scraping them with a common knife. The dairy-maid, in doing this, sits down on the floor, takes a cheese in her lap, and with the knife scrapes both sides and edge clean, taking off all scurf they may have contracted. The cheese, if intended for the London market, as is generally the case, when it has been thus cleaned, is rubbed all over with a paint made of Indian red, or of Spanish brown, or of a mixture of both, and small beer. It is rubbed on with a woollen cloth. After being painted, it is turned over twice a week, and oftener in damp weather; and, as soon as the state of the paint will permit, the edges of the cheese and about an inch of each side is rubbed hard with a cloth, at least once a week.

Characteristics of true Gloucester.—The marks of true Gloucester cheeses are,—'the blue coat,' which arises through the paint on their sides, and which is a sure sign of their richness and sweetness,—the yellow, golden hue of their edges,—a smooth, close, and wax-like texture,—a very mild and rich flavor,—not crumbling when cut into thin slices, nor parting when toasted, with the oily matter they contain, but softening, without burning. If cheese has been soured in the making, either from being too long in hand, or from want of attention in scalding the utensils, nothing will cause it to assume the blue coat. If the curd is salted, when ground down before being put into the vats, the salt has the effect of giving a skin to each of the particles of the curd it comes in contact with, which prevents them from intimately uniting; and, although the curd may be pressed together and become good cheese, yet it never becomes a smooth, close, solid mass, like that which is salted after it is made, but is of a loose texture, and crumbles when cut; and although it may be equally fat, yet, in toasting, the fat melts out of it, and the cheesy part burns. The skin of the cheese, too, is not tough and solid, but hard and brittle, and, when examined, seems to be formed of many irregular portions, something like mosaic work.

Making of the Butter.—The milk, as it comes from the cows, is strained through a hair-sieve into the tin vessels, which are about four inches deep. It is allowed to stand only twelve hours, when the cream is taken off with the skimming-dish and put into the cream vessels, and the milk is warmed and carried to the cheese tub.—The cream is shifted into fresh cream vessels once a day, and is also stirred frequently during the day with the wooden knife, that is always kept in each of the cream vessels. This continued shifting and stirring of the cream prevents a skin from forming on the top of it, which is injurious to the butter.

In summer or in hot weather, several gallons of cold water should be put into the churn, and allowed to remain an hour in it to cool the churn, before the cream is put into it. The cream is strained through a coarse canvass cloth kept exclusively for this purpose, and then put into the churn. The operation of churning should, in summer or in hot weather, be very slow, otherwise the butter will be very soft when taken out: but in winter or in cold weather, and particularly in frosty weather, the churn should be prepared for receiving the cream by putting hot water into it, and allowing it to remain for half an hour to heat the churn; and then the operation of churning should be performed quickly, and now and then the air, that escapes from the cream in

churning, should be let out of the churn or it will make the cream froth, and lengthen the process of churning very much.

When the butter is taken out of the churn, it is customary with most people to wash it with cold water before salting it. This is never done here, Mrs. Hayward having found from long experience, that butter retains its sweetness much longer when no water is used in making it up.—When it is taken out of the churn, it is well worked with the hand, which presses out most of the milk; it is then beaten with a cloth, or rather, a cloth is repeatedly pressed down upon it, which absorbs all the remaining milk. When this is properly performed, and no trace of buttermilk remains, it is salted to the taste with finely powdered salt, which is well mixed with it by working it in with the hands. It is then weighed into half-pounds, and made up in rolls, about nine inches long. The process of making butter from the cream of whey is the same as that just described. Butter is made twice a week during summer.

The quantity of milk butter made on this farm is about 16lbs. per cow, and that of whey butter about 25bls. per cow per annum. About 2½lbs. of salt are used to a cwt. of butter.

Comparative Estimate of the several applications of Milk, viz., to the feeding of Veal, and to the making of Cheese and Butter.

In feeding calves for the butcher, it generally takes seven weeks to feed them to about a cwt. each; and they consume the following quantity of milk in the seven weeks;—About 10 gallons the first week; 16, the second; 20, the third; 24, the fourth; 27, the fifth; 30, the sixth; and 32, the seventh: so that, it takes 159, or say 160 gallons of milk to produce 112lbs. of veal. The average money value of the above modes of converting milk into a marketable commodity will stand thus—

100 gall's of milk produce 112lbs of cheese of the best quality, which at 6*d.* per lb. is £2 16 0—and 5lbs. of whey butter, which at 8*d.* per lb. is 3*s.* 4*d*—Value of 100 gallons of milk, when converted into cheese - - - -	£2 19 4
100 gallons produce of milk butter 3¼lbs. which at 10*d.* is £1 8 4—and of cheese of the worst quality 7¼lbs which at 3*d.* per lb. is 18*s.*6*d.*—Value of 100 gallons when made into butter - -	£2 6 10
160 gallons produce 112lbs. of veal, which at 7½*d.* per pound, is £3 10 0—but calves, when dropped, generally sell at 10*s.* each, which being deducted, leaves, as the value of 160 gallons £3 0 0—& therefore, the value of 100 gallons in feeding veal - - - -	£1 17 6

Thus making cheese of the first quality is more profitable than either making milk-butter or feeding veal; yet many farmers continue to feed calves during the early part of the spring—a practice not justified by an examination of results, but persevered in from habit, as many practices are, where active pursuits are not conjoined with a spirit of inquiry and comparison.

INFLUENCE OF THE MOON.

(Concluded from page 192.)

The moon may also have an influence upon the variation of the weather, in an indirect manner; that is, by the motion of the waters of the ocean, at least upon some coasts. It is true that in the open sea, the height of the tides never exceeds three or four feet; but upon the coasts, in bays, and narrow channels, the rise of the tides is much more considerable. At Brest, for example, it rises more than twenty feet, and at Bristol more than fifty. Ought not the motion of these large masses of water to occasion some variations in the atmosphere, especially as they appear to have a small influence on the electricity of the air? The inhabitants of the sea coast believe it to be a fact, that the changes in the weather, and the force and direction of the wind and clouds, depend on the tides. We may here observe, that the tides of the ocean, and those of the atmosphere, do not happen at the same instant, though both are produced by the sun and moon, and both have the same period. The air being easily moved, and not being hindered by any obstacle, instantly obeys the attractive force of the moon; but the waters of the ocean are more tardy in obeying this force. On this account, the atmospheric tides immediately follow the passage of the moon over the meridian; but high water, in the open sea, does not take place till three hours afterwards; and on coasts and in bays, it happens still later. It is possible then that the *mediate* and *immediate* effects of the moon upon the atmosphere, in some places, mutually destroy each other; and this is perhaps the cause why the astronomer *Horseley* at Oxford could not perceive in the English observations any relation between the weather and the phases of the moon; while *Toaldo* at Padua believed that he *could distinguish* the moon's influence in the observations made during fifty years by *Poleni*. Now though I would not deny but that the results deduced from observations by *Toaldo* might be partly true for the climate of Italy, I must still observe that from the great number of exceptions to his rules, he was himself convinced that the lunar influence was *extremely small*. A series of experiments for many years has convinced me, that in our climate, where the weather is subject to more considerable and more numerous variations, the rules of *Toaldo* are entirely wrong. For example, on the 7th of December, 1813, the full moon coincided with the perigee, and two days after the moon had its greatest northern declination; so that from the principles of *Toaldo*, the lunar influence ought to have been the greatest possible; but notwithstanding all this, there was not any sensible change in the weather. I believe then that I have *demonstrated* that the influence of the moon upon the weather is so small that it is totally lost among the infinite number of other forces and causes which change the equilibrium of our very movable atmosphere. The influence of the moon upon the weather, and upon the atmosphere, being so insensible, we are entitled very much to suspect its pretended influence either upon men, animals, or plants. In fact, it is *all of it* due to illusion and prejudice. It is evident that the duration of the period of some phenomena exhibited by man in health, agree only nearly, and never exactly, with the lunar revolutions; and that these phenomena show themselves under every phase of the moon, not only in persons of the same age and of the same constitution, but also in the same individual. This alone is sufficient to show that the moon has no influence, and all *modern physicians* are agreed on this point.

I have little faith in the observation of *Sanctorius*, namely: that men in health gain one or two pounds in weight at the commencement of the month, and that they lose as much towards the end. In the same manner observations made with the greatest care have induced me to doubt very much the remark cited by the poet *Lucilius*, and often since repeated, namely: that lobsters, oysters, and other shell fish, are fatter while the moon is on the increase, than when she is decreasing. A very little attention will convince us of the nullity of this assertion; especially if we can but credit the remarks made by the able physician, *Rohault*. I have the greatest confidence in the very careful experiments made by the celebrated agriculturists, *Laquinterie*, *Nardmann*, *Reichard* and *Hartenfels*; also by the great naturalists *Buffon* and *Reaumur*; who proved distinctly that the increase or decrease of the moon had no influence, either upon the germination of seeds, or upon the increase of plants, or upon the rapidity of their development, or upon their quality. I have also much difficulty in believing that the light of the moon produces a particular effect different from that of any other light. The experiments made in Rome in 1783 by *Athan. Cavallon*, and repeated by *Bertholon de Saint-Lazare*, prove nothing respecting lunar light augmenting evaporation; in the same manner I assert that those of *Weitz* made with potash at Lautenberg, prove nothing respecting the lunar rays drawing forth humidity. If in South America and Batavia, they have such a dread of moonlight, I should attribute the pretended pernicious effects said to be produced, more to the humidity of the air, and to the coldness of the nights, than to the effect of any influence of the moon. *Bontius* observed the tetanus to take place at Java most frequently during the night, in the rainy season; and he expressly remarked, that the two terrible diseases so frequent in the East Indies, namely, the cholera morbus and the dysentery, most frequently took place during the rainy months of summer. The celebrated *Reil* observes that sailors have become incapable of supporting day-light from having slept exposed to the light of the moon. I have however never heard from our sailors any complaint of this kind. *M. Reil* also asserts that children sleep less tranquilly when the moon is on the increase. Having had no experience on this subject, I cannot speak decidedly as to the truth of it; but in any case we could explain it without having recourse to the influence of the moon. I should be glad to know if painters have really remarked that the feeble light of the moon has an effect upon their colors, as they have pretended it has.* In a word, experience does not prove any particular influence of the moon's phases upon animal organization; and the theory given by *R. Mead* is absolutely false. I can positively assert that I have always been attentive to this subject, with respect to sick persons, during the long time that I have practiced medicine, and that I never perceived any relation between the courses of the moon and my patients, or between their symptoms and the means of affecting cures. Neither have I remarked any influence of the lunar phases, either on diseases caused by worms, or dropsy, tumors, or even on epileptic diseases; I will not however, deny, contrary to so many ancient observations, but that the moon may have some influence in particular diseases.

Among all the instruments we can employ in order to detect natural agents otherwise imperceptible, the most sensible, as *Laplace* has very properly observed, are the nerves, the sensibility of which is often increased by disease. It is by means of the nerves that some sick persons are able to perceive the influence of the moon in particular situations, that influence being so extremely small.

It may also be this circumstance, perhaps, which has discovered to physicians that there is a relation between the lunar phases and the access of epilepsy and insanity. I dare not decide whether we are to explain in this manner the remarks made by *Diemerbræck* and *Remuzzini*, respecting the pestilential fevers which raged in the years 1636, 1692, 1693 and 1694. It could however be owing to nothing but accident that so many persons affected with fever died during the time of lunar eclipse which happened on the 21st of January, 1693. The influence of the moon upon the crisis of diseases taught by *Galen*, and defended so long in the schools of medicine, is contradicted by experience, at least in Europe; and if *Balfour* be right in asserting that there is a connection between the tides and the access of endemic fevers in India, and that the crisis of fevers happens but at the moment when the lunisolar action begins to decrease, we can only so far agree with him, that this effect only takes place near the sea-coast. In general we must read those authors who refer so many things to the effects of the moon on diseases, with considerable distrust. It is here, as in many cases of reverie—we only *see* it when we *believe* it. A belief in this influence can only deceive the observer, who, otherwise fond of truth, shares this belief with the sick person; and thus it is that hope and fear excite in the imagination, effects to which the moon does not in any way contribute. Thus also it was in former times. People in general were afraid of eclipses of the sun and moon, and believed that these phenomena exercised certain pernicious influences over sick persons, and persons possessed of weak nerves; now absolutely no sick person perceives the effect, and the physicians pay no attention to it.

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* *Note by the French translator.*—Experiments made at the Royal Observatory at Paris, have proved that the light of the moon, condensed by a very powerful lens, had no effect whatever in altering chimical products, though very sensibly and easily affected by the light of the sun.